

# Pedalcycles in Motor Vehicle Crashes



Out of 63,364 total crashes, one or more pedalcycles were involved in:

- 462 crashes (all types)
- 3 fatal crashes
- 453 injury crashes
- 6 property damage crashes

3 riders were killed, or 00.67% of all fatalities  
460 riders were injured, or 01.29% of all injuries

## Injury Severity of All Persons Involved

Severity of Injury	Fatalities & Injuries			
	Pedalcycles		All Others	
	Number	Percent	Number	Percent
Fatal	3	100.00%	0	0.00%
Major	53	100.00%	0	0.00%
Minor	306	99.67%	1	0.33%
Possible	98	96.08%	4	3.92%
Unknown	3	100.00%	0	0.00%
Total	463	98.93%	5	1.07%

This chart compares injury severity of pedalcyclists with all other fatalities and injuries (i.e., occupants of other vehicles, pedestrians) in crashes that involved pedalcycles.

## Fatalities & Injuries by Protective Device

Protective Device Used by Pedalcyclists Killed & Injured	Fatalities & Injuries			
	Killed		Injured	
	Number	Percent	Number	Percent
None	1	33.33%	328	71.30%
Lap Belt	0	0.00%	0	0.00%
Lap & Shoulder Belt	0	0.00%	0	0.00%
Airbag Deployed	0	0.00%	0	0.00%
Child Restraint	0	0.00%	0	0.00%
Helmet	1	33.33%	9	1.96%
Passive Belt	0	0.00%	0	0.00%
Other	0	0.00%	26	5.65%
Unknown	1	33.33%	97	21.09%
Total	3	100.00%	460	100.00%

## Fatalities & Injuries by Gender

Gender of Pedalcyclists Killed & Injured	Fatalities & Injuries			
	Killed		Injured	
	Number	Percent	Number	Percent
Female	0	0.00%	105	22.83%
Male	3	100.00%	355	77.17%
Unknown	0	0.00%	0	0.00%
Total	3	100.00%	460	100.00%

## Fatalities & Injuries by Position

Position of Pedalcyclists Killed & Injured	Fatalities & Injuries			
	Killed		Injured	
	Number	Percent	Number	Percent
Driver	0	0.00%	0	0.00%
Front Seat Passenger	0	0.00%	0	0.00%
Back Seat Passenger	0	0.00%	0	0.00%
Third+ Seat Passenger	0	0.00%	0	0.00%
Bus Passenger	0	0.00%	0	0.00%
Riding on Exterior	0	0.00%	0	0.00%
MC/Moped Driver	0	0.00%	0	0.00%
MC/Moped Passenger	0	0.00%	0	0.00%
Pedalcyclist	3	100.00%	460	100.00%
Other	0	0.00%	0	0.00%
Unknown	0	0.00%	0	0.00%
Total	3	100.00%	460	100.00%

## Fatalities & Injuries by Age Group

Age Group of Pedalcyclists Killed & Injured	Fatalities & Injuries			
	Killed		Injured	
	Number	Percent	Number	Percent
<b>Under Age 21</b>				
14 & Under	0	0.00%	248	53.91%
15	0	0.00%	23	5.00%
16	0	0.00%	8	1.74%
17	0	0.00%	8	1.74%
18	0	0.00%	5	1.09%
19	0	0.00%	11	2.39%
20	0	0.00%	8	1.74%
Total	0	0.00%	311	67.61%
<b>All Ages</b>				
14 & Under	0	0.00%	248	53.91%
15 to 24	0	0.00%	82	17.83%
25 to 34	0	0.00%	46	10.00%
35 to 44	1	33.33%	34	7.39%
45 to 54	1	33.33%	16	3.48%
55 to 64	1	33.33%	8	1.74%
65 to 74	0	0.00%	5	1.09%
75 & Over	0	0.00%	1	0.22%
Unknown	0	0.00%	20	4.35%
Total	3	100.00%	460	100.00%

Under age 21 percentages based on total for all ages.

## Fatalities & Injuries by Area of Injury

Area of Injury of Pedalcyclists Killed & Injured	Fatalities & Injuries			
	Killed		Injured	
	Number	Percent	Number	Percent
Upper Torso	0	0.00%	31	6.74%
Lower Torso	0	0.00%	15	3.26%
Internal	1	33.33%	1	0.22%
Head	1	33.33%	50	10.87%
Arms	0	0.00%	48	10.43%
Legs	0	0.00%	96	20.87%
Multiple	1	33.33%	190	41.30%
Other/Unknown	0	0.00%	29	6.30%
Total	3	100.00%	460	100.00%

# Pedalcycles in Motor Vehicle Crashes

## Riders by Gender

Gender of Pedalcyclists in Crashes	Pedalcyclists			
	Fatal		Injury/Property	
	Number	Percent	Number	Percent
Female	0	0.00%	105	22.53%
Male	3	100.00%	360	77.25%
Unknown	0	0.00%	1	0.21%
Total	3	100.00%	466	100.00%

## Riders by Age Group

Age Group of Pedalcyclists in Crashes	Pedalcyclists			
	Fatal		Injury/Property	
	Number	Percent	Number	Percent
<b>Under Age 21</b>				
14 & Under	0	0.00%	248	53.22%
15	0	0.00%	23	4.94%
16	0	0.00%	8	1.72%
17	0	0.00%	8	1.72%
18	0	0.00%	5	1.07%
19	0	0.00%	11	2.36%
20	0	0.00%	8	1.72%
Total	0	0.00%	311	66.74%
<b>All Ages</b>				
14 & Under	0	0.00%	248	53.22%
15 to 24	0	0.00%	82	17.60%
25 to 34	0	0.00%	46	9.87%
35 to 44	1	33.33%	34	7.30%
45 to 54	1	33.33%	16	3.43%
55 to 64	1	33.33%	8	1.72%
65 to 74	0	0.00%	5	1.07%
75 & Over	0	0.00%	1	0.21%
Unknown	0	0.00%	26	5.58%
Total	3	100.00%	466	100.00%

Under age 21 percentages based on total for all ages.

## Bicycle/Pedalcycle Action

Pedalcycle Action in Crashes	Pedalcycles			
	Fatal		Injury/Property	
	Number	Percent	Number	Percent
Going Straight	1	33.33%	194	41.63%
Turning Left	0	0.00%	19	4.08%
Turning Right	0	0.00%	11	2.36%
Making U-Turn	0	0.00%	0	0.00%
Passing	0	0.00%	0	0.00%
Changing Lanes	0	0.00%	1	0.21%
Merging	0	0.00%	1	0.21%
Parking	0	0.00%	0	0.00%
Slowing/Stopping	0	0.00%	2	0.43%
Backing	0	0.00%	0	0.00%
Stopped for Sign/Signal	0	0.00%	0	0.00%
Stopped in Traffic	0	0.00%	0	0.00%
Stalled in Traffic	0	0.00%	0	0.00%
Properly Parked	0	0.00%	0	0.00%
Improperly Parked	0	0.00%	0	0.00%
Unattended Moving Vehicle	0	0.00%	0	0.00%
Other	0	0.00%	15	3.22%
Unknown	2	66.67%	223	47.85%
Total	3	100.00%	466	100.00%

## Riders by Condition

Condition of Pedalcyclists in Crashes	Pedalcyclists			
	Fatal		Injury/Property	
	Number	Percent	Number	Percent
Apparently Normal	1	33.33%	208	44.64%
Physical Defect	0	0.00%	2	0.43%
Fatigued	0	0.00%	0	0.00%
Apparently Asleep	0	0.00%	0	0.00%
Illness	0	0.00%	0	0.00%
Under Medication	0	0.00%	0	0.00%
Infirmities of Age	0	0.00%	3	0.64%
Drinking-Not Impaired	0	0.00%	3	0.64%
Drinking-Impaired	0	0.00%	1	0.21%
Drugs	0	0.00%	0	0.00%
Other	0	0.00%	5	1.07%
Unknown	2	66.67%	244	52.36%
Total	3	100.00%	466	100.00%

## Contributing Circumstances

Contributing Circumstances	Pedalcycles			
	Fatal		Injury/Property	
	Number	Percent	Number	Percent
None Apparent	1	33.33%	70	13.89%
Ran Traffic signal	0	0.00%	8	1.59%
Ran Stop Sign	0	0.00%	22	4.37%
Passed Stopped School Bus	0	0.00%	0	0.00%
Improper Passing	0	0.00%	4	0.79%
Left of Center, Not Passing	0	0.00%	5	0.99%
FTYROW at Intersection	0	0.00%	9	1.79%
FTYROW From Stop Sign	0	0.00%	8	1.59%
FTYROW From Yield Sign	0	0.00%	0	0.00%
FTYROW Making Left Turn	0	0.00%	3	0.60%
FTYROW From Driveway	0	0.00%	8	1.59%
FTYROW From Parked	0	0.00%	0	0.00%
FTYROW to Pedestrian	0	0.00%	1	0.20%
FTYROW Other	0	0.00%	12	2.38%
Wrong Way/One-Way	0	0.00%	1	0.20%
Too Fast for Conditions	0	0.00%	5	0.99%
Exceeding Speed Limit	0	0.00%	1	0.20%
Drag Racing	0	0.00%	0	0.00%
Improper Turn	0	0.00%	1	0.20%
Improper Lane Change	0	0.00%	2	0.40%
Following Too Close	0	0.00%	2	0.40%
No/Improper Signal	0	0.00%	2	0.40%
Disregarded Railroad Signal	0	0.00%	0	0.00%
Disregarded Warning Signal	0	0.00%	2	0.40%
Reckless Driving	0	0.00%	2	0.40%
Improper Backing	0	0.00%	0	0.00%
Illegal/Improper Parking	0	0.00%	0	0.00%
Failure to Control Vehicle	0	0.00%	4	0.79%
Headlights Not On	0	0.00%	8	1.59%
Inattentive/Distracted	0	0.00%	20	3.97%
Confused	0	0.00%	0	0.00%
Vision Obscured	0	0.00%	11	2.18%
Oversized/Loaded Vehicle	0	0.00%	2	0.40%
Inexperienced Driver	0	0.00%	8	1.59%
Other	0	0.00%	27	5.36%
Unknown	2	66.67%	256	50.79%
Total	3	100.00%	504	100.00%

Up to two circumstances may be listed for each driver/vehicle involved in a crash.  
FTYROW—Failure to Yield Right-of-Way.

# Mopeds & All Terrain Vehicles



Out of 63,364 total crashes, one or more mopeds or all terrain vehicles were involved in:

- 116 crashes (all types)
- 3 fatal crashes
- 91 injury crashes
- 22 property damage crashes

- 3 riders were killed, or 00.67% of all fatalities
- 93 riders were injured, or 00.26% of all injuries

## Injury Severity of All Persons Involved

Severity of Injury	Fatalities & Injuries			
	Mopeds		All Others	
	Number	Percent	Number	Percent
Fatal	3	100.00%	0	0.00%
Major	26	96.30%	1	3.70%
Minor	52	89.66%	6	10.34%
Possible	13	81.25%	3	18.75%
Unknown	2	100.00%	0	0.00%
Total	96	90.57%	10	9.43%

This chart compares injury severity of moped and all terrain vehicle riders with all other fatalities and injuries (i.e., occupants of other vehicles, pedestrians) in crashes that involved mopeds and all terrain vehicles.

## Fatalities & Injuries by Protective Device

Protective Device	Fatalities & Injuries			
	Killed		Injured	
	Number	Percent	Number	Percent
None	3	100.00%	61	65.59%
Lap Belt	0	0.00%	0	0.00%
Lap & Shoulder Belt	0	0.00%	5	5.38%
Airbag Deployed	0	0.00%	0	0.00%
Child Restraint	0	0.00%	0	0.00%
Motorcycle Helmet	0	0.00%	8	8.60%
Passive Belt	0	0.00%	0	0.00%
Other	0	0.00%	2	2.15%
Unknown	0	0.00%	17	18.28%
Total	3	100.00%	93	100.00%

## Fatalities & Injuries by Gender

Gender of Killed & Injured	Fatalities & Injuries			
	Killed		Injured	
	Number	Percent	Number	Percent
Female	0	0.00%	14	15.05%
Male	3	100.00%	79	84.95%
Unknown	0	0.00%	0	0.00%
Total	3	100.00%	93	100.00%

## Fatalities & Injuries by Position

Position in Vehicle	Fatalities & Injuries			
	Killed		Injured	
	Number	Percent	Number	Percent
Driver	3	100.00%	38	40.86%
Front Seat Passenger	0	0.00%	0	0.00%
Back Seat Passenger	0	0.00%	0	0.00%
Third+ Seat Passenger	0	0.00%	0	0.00%
Bus Passenger	0	0.00%	0	0.00%
Riding on Exterior	0	0.00%	0	0.00%
MC/Moped Driver	0	0.00%	47	50.54%
MC/Moped Passenger	0	0.00%	2	2.15%
Pedalcyclist	0	0.00%	0	0.00%
Unknown	0	0.00%	6	6.45%
Total	3	100.00%	93	100.00%

## Fatalities & Injuries by Age Group

Age Group of Killed & Injured	Fatalities & Injuries			
	Killed		Injured	
	Number	Percent	Number	Percent
<b>Under Age 21</b>				
14 & Under	0	0.00%	29	31.18%
15	0	0.00%	15	16.13%
16	0	0.00%	9	9.68%
17	1	33.33%	5	5.38%
18	0	0.00%	6	6.45%
19	1	33.33%	0	0.00%
20	0	0.00%	1	1.08%
Total Under 21*	2	66.67%	65	69.89%
<b>All Ages</b>				
14 & Under	0	0.00%	29	31.18%
15 to 24	2	66.67%	39	41.94%
25 to 34	0	0.00%	8	8.60%
35 to 44	0	0.00%	5	5.38%
45 to 54	1	33.33%	7	7.53%
55 to 64	0	0.00%	2	2.15%
65 to 74	0	0.00%	1	1.08%
75 & Over	0	0.00%	2	2.15%
Unknown	0	0.00%	0	0.00%
Total	3	100.00%	93	100.00%

Under age 21 percentages based on total for all ages.

## Fatalities & Injuries by Area of Injury

Area of Injury	Fatalities & Injuries			
	Killed		Injured	
	Number	Percent	Number	Percent
Upper Torso	0	0.00%	8	8.60%
Lower Torso	0	0.00%	3	3.23%
Internal	0	0.00%	1	1.08%
Head	1	33.33%	13	13.98%
Arms	0	0.00%	6	6.45%
Legs	0	0.00%	13	13.98%
Multiple	1	33.33%	49	52.69%
Other/Unknown	1	33.33%	0	0.00%
Total	3	100.00%	93	100.00%

# Mopeds & All Terrain Vehicles

## Drivers by Gender

Gender of Driver	Drivers in Crashes			
	Fatal		Injury/Property	
	Number	Percent	Number	Percent
Female	0	0.00%	13	11.30%
Male	3	100.00%	101	87.83%
Unknown	0	0.00%	1	0.87%
Total	3	100.00%	115	100.00%

## Drivers by Age Group

Age Group of Driver	Drivers in Crashes			
	Fatal		Injury/Property	
	Number	Percent	Number	Percent
<b>Under Age 21</b>				
14 & Under	0	0.00%	27	23.48%
15	0	0.00%	18	15.65%
16	0	0.00%	7	6.09%
17	1	33.33%	6	5.22%
18	0	0.00%	6	5.22%
19	1	33.33%	3	2.61%
20	0	0.00%	1	0.87%
Total Under 21*	2	66.67%	68	59.13%
<b>All Ages</b>				
14 & Under	0	0.00%	27	23.48%
15 to 24	2	66.67%	48	41.74%
25 to 34	0	0.00%	14	12.17%
35 to 44	0	0.00%	6	5.22%
45 to 54	1	33.33%	10	8.70%
55 to 64	0	0.00%	5	4.35%
65 to 74	0	0.00%	3	2.61%
75 & Over	0	0.00%	1	0.87%
Unknown	0	0.00%	1	0.87%
Total	3	100.00%	115	100.00%

Under age 21 percentages based on total for all ages.

## Vehicle Action

Vehicle Action	Vehicles in Crashes			
	Fatal		Injury/Property	
	Number	Percent	Number	Percent
Going Straight	1	33.33%	82	70.09%
Turning Left	0	0.00%	7	5.98%
Turning Right	1	33.33%	1	0.85%
Making U-Turn	0	0.00%	1	0.85%
Passing	0	0.00%	1	0.85%
Changing Lanes	0	0.00%	0	0.00%
Merging	0	0.00%	0	0.00%
Parking	0	0.00%	0	0.00%
Slowing/Stopping	0	0.00%	4	3.42%
Backing	0	0.00%	1	0.85%
Stopped for Sign/Signal	0	0.00%	0	0.00%
Stopped in Traffic	0	0.00%	0	0.00%
Stalled in Traffic	0	0.00%	0	0.00%
Properly Parked	0	0.00%	2	1.71%
Improperly Parked	0	0.00%	1	0.85%
Unattended Moving Vehicle	0	0.00%	0	0.00%
Other	0	0.00%	7	5.98%
Unknown	1	33.33%	10	8.55%
Total	3	100.00%	117	100.00%

## Drivers by Condition

Driver Condition	Drivers in Crashes			
	Fatal		Injury/Property	
	Number	Percent	Number	Percent
Apparently Normal	2	66.67%	93	80.87%
Physical Defect	0	0.00%	0	0.00%
Fatigue	0	0.00%	0	0.00%
Apparently Asleep	0	0.00%	0	0.00%
Illness	0	0.00%	1	0.87%
Under Medication	0	0.00%	0	0.00%
Infirmities of Age	0	0.00%	0	0.00%
Drinking-Not Impaired	0	0.00%	0	0.00%
Drinking-Impaired	0	0.00%	4	3.48%
Drugs	0	0.00%	2	1.74%
Other	0	0.00%	2	1.74%
Unknown	1	33.33%	13	11.30%
Total	3	100.00%	115	100.00%

## Driver/Vehicle Related Circumstances

Contributing Circumstances	Moped Drivers			
	Fatal		Injury/Property	
	Number	Percent	Number	Percent
None Apparent	0	0.00%	37	26.43%
Ran Traffic Signal	0	0.00%	0	0.00%
Ran Stop Sign	1	25.00%	4	2.86%
Passed Stopped School Bus	0	0.00%	0	0.00%
Improper Passing	0	0.00%	1	0.71%
Left of Center, Not Passing	0	0.00%	1	0.71%
FTYROW at Intersection	0	0.00%	3	2.14%
FTYROW from Stop Sign	0	0.00%	4	2.86%
FTYROW from Yield Sign	0	0.00%	0	0.00%
FTYROW Making Left Turn	0	0.00%	0	0.00%
FTYROW from Driveway	2	50.00%	1	0.71%
FTYROW from Parked	0	0.00%	0	0.00%
FTYROW to Pedestrian	0	0.00%	0	0.00%
FTYROW Other	0	0.00%	3	2.14%
Wrong Way/One-Way	0	0.00%	1	0.71%
Too Fast for Conditions	0	0.00%	5	3.57%
Exceeding Speed Limit	0	0.00%	0	0.00%
Drag Racing	0	0.00%	0	0.00%
Improper Turn	0	0.00%	1	0.71%
Improper Lane Change	0	0.00%	0	0.00%
Following Too Close	0	0.00%	4	2.86%
No/Improper Signal	0	0.00%	0	0.00%
Disregarded Railroad Signal	0	0.00%	0	0.00%
Disregarded Warning Signal	0	0.00%	0	0.00%
Reckless Driving	0	0.00%	6	4.29%
Improper Backing	0	0.00%	1	0.71%
Illegal/Improper Parking	0	0.00%	1	0.71%
Failure to Control Vehicle	0	0.00%	24	17.14%
Headlights Not On	0	0.00%	2	1.43%
Inattentive/Distracted	1	25.00%	8	5.71%
Confused	0	0.00%	0	0.00%
Vision Obscured	0	0.00%	1	0.71%
Oversized/Loaded Vehicle	0	0.00%	0	0.00%
Inexperienced Driver	0	0.00%	10	7.14%
Other	0	0.00%	8	5.71%
Unknown	0	0.00%	14	10.00%
Total	4	100.00%	140	100.00%

Up to two circumstances may be listed for each driver/vehicle involved in a crash.  
FTYROW—Failure to Yield Right-of-Way.